IFWO

RAW SEQUENCE LISTING   DATE: 09/20/2004
PATENT APPLICATION: US/10/707,747   TIME: 16:13:05

Input Set : **A:\Sequence Listings.ST25.txt**
Output Set: **N:\CRF4\09202004\J707747.raw**

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  3 <110> APPLICANT: University of South Florida
  5 <120> TITLE OF INVENTION: DETECTION OF RED TIDE ORGANISMS BY NUCLEIC ACID
AMPLIFICATION
  7 <130> FILE REFERENCE: 1372.120PCR
C-->  9 <140> CURRENT APPLICATION NUMBER: US/10/707,747
C-->  9 <141> CURRENT FILING DATE: 2004-01-08
  9 <160> NUMBER OF SEQ ID NOS: 8
 11 <170> SOFTWARE: PatentIn version 3.2
 13 <210> SEQ ID NO: 1
 14 <211> LENGTH: 20
 15 <212> TYPE: DNA
 16 <213> ORGANISM: artificial sequence
 18 <220> FEATURE:
 19 <223> OTHER INFORMATION: Forward primer designed to amplify and detect the 91-bp
region of
 20        the rbcL gene of K. brevis.
 22 <400> SEQUENCE: 1
 23 tgaaacgtta ttgggtctgt                                    20
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 28 <212> TYPE: DNA
 29 <213> ORGANISM: artificial sequence
 31 <220> FEATURE:
 32 <223> OTHER INFORMATION: Reverse primer designed to amplify and detect the 91-bp
region
 33        of the rbcl gene specific K. brevis.
 35 <400> SEQUENCE: 2
 36 aggtacacac tttcgtaaac ta                                 22
 39 <210> SEQ ID NO: 3
 40 <211> LENGTH: 19
 41 <212> TYPE: DNA
 42 <213> ORGANISM: artificial sequence
 44 <220> FEATURE:
 45 <223> OTHER INFORMATION: Fluorogenic probe designed to amplify and detect the 91-bp
 46        region of the rbcl gene specific K. brevis.
 48 <400> SEQUENCE: 3
 49 ttaaccttag tctcgggta                                     19
 52 <210> SEQ ID NO: 4
 53 <211> LENGTH: 19
 54 <212> TYPE: DNA
 55 <213> ORGANISM: artificial sequence
 57 <220> FEATURE:
 58 <223> OTHER INFORMATION: Real Time NASBA forward primer for the marker region of rbcL
gene
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ENTERED

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59       specific to K. brevis.
61 <400> SEQUENCE: 4
62 acgttattgg gtctgtgta                                    19
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Input Set : **A:\Sequence Listings.ST25.txt**
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65 <210> SEQ ID NO: 5
66 <211> LENGTH: 50
67 <212> TYPE: DNA
68 <213> ORGANISM: artificial sequence
70 <220> FEATURE:
71 <223> OTHER INFORMATION: Reverse primer for real time NASBA to dtect the marker region
of
72        the rcbL gene specific to K. brevis.
74 <400> SEQUENCE: 5
75 aattctaata cgactcacta tagggagaag gtacacactt tcgtaaacta          50
78 <210> SEQ ID NO: 6
79 <211> LENGTH: 33
80 <212> TYPE: DNA
81 <213> ORGANISM: artificial sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: Molecular beacon used for real time NASBA assay.
86 <400> SEQUENCE: 6
87 cgatcgctta gtctcgggtt attttttcga tcg                          33
90 <210> SEQ ID NO: 7
91 <211> LENGTH: 19
92 <212> TYPE: DNA
93 <213> ORGANISM: artificial sequence
95 <220> FEATURE:
96 <223> OTHER INFORMATION: PCR primer set was designed with sequence data from Karenia
97        mikimotoi (GenBank accession no. ABO34635) by modifying existing
98        chromophyte rbcL primers in order to amplify a 554-bp region
99        (approximately one-third) of Karenia's rbcL gene (forward
102 <400> SEQUENCE: 7
103 atgatgaraa yattaactc                                         19
106 <210> SEQ ID NO: 8
107 <211> LENGTH: 21
108 <212> TYPE: DNA
109 <213> ORGANISM: artificial sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: PCR primer set was designed with sequence data from Karenia
113        mikimotoi (GenBank accession no. ABO34635) by modifying existing
114        chromophyte rbcL primers in order to amplify a 554-bp region
115        (approximately one-third) of Karenia's rbcL gene (reverse
118 <400> SEQUENCE: 8
119 atttgtcccg cattgattcc t                                      21
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VERIFICATION SUMMARY   DATE: 09/20/2004
PATENT APPLICATION: **US/10/707,747**   TIME: 16:13:06

Input Set : **A:\Sequence Listings.ST25.txt**
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L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date